UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,719	07/13/2000	REI MIYAMOTO	FQ5-481	4797

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EXAMINER
NGUYEN, TOAN D

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/615,719	MIYAMOTO, REI
	Examiner	Art Unit
	Toan D. Nguyen	2665

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _13 October 2005_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-16_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _6-10 and 16_ is/are allowed.

6)☒ Claim(s) _1 and 11_ is/are rejected.

7)☒ Claim(s) _2-5 and 12-15_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _13 July 2000_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☒ All   b)☐ Some * c)☐ None of:

  1.☒ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _10/13/05_

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 2-4, 6-7, 9 and 13-14 are objected to because of the following

informalities:

In claim 2 line 2, it is suggested to change "an average bandwidth" to --- the

average bandwidth ---. Similar problem exists in claim 4 line 2.

In claim 3 line 2, it is suggested to change "existing QoS-unspecified traffic" to ---

the existing QoS-unspecified traffic ---. Similar problems exist in claim 9 line 5 and line

8, claim 13 line 2, and claim 14 line 3.

In claim 4 line 5, it is suggested to change "a first average QoS-unspecified

traffic" to --- the first average QoS-unspecified traffic ---. Similar problems exist in claim

9 line 11, and claim 14 line 5.

In claim 6 line 6, it is suggested to change "for each QoS-unspecified" to --- for

the each QoS-unspecified ---.

In claim 7 line 2, it is suggested to change "an average QoS-unspecified" to ---

the average QoS-unspecified ---.

In claim 9 line 8, it is suggested to change "a link" to --- the link ---.

In claim 9 line 12, it is suggested to change "a QoS-unspecified connection" to ---

the QoS-unspecified connection ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claim 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Yin et al. (US 5,982,748) in view of Ho et al. (US 6,687,254).

For claim 1, Yin et al. disclose, method and apparatus for controlling admission

of connection requests, comprising:

receiving a QoS (Quality of Service) specified connection request (figure 3,

reference 54, col. 5 lines 51-53);

calculating an assigned bandwidth on a link associated with the QoS-specified

connection request (figure 3, reference 60, Table 2, col. 5 lines 61-62);

determining whether the QoS-specified connection request is accepted based on

a combination of the assigned bandwidth and the average bandwidth (figure 3, col. 6

lines 9-19). However, Yin et al. does not disclose calculating an average bandwidth of

all existing QoS-unspecified traffic on the link associated with the QoS specified

connection request. In an analogous art, Ho et al. disclose calculating an average

bandwidth for all existing QoS unspecified traffic on the link associated with the

QoS-specified connection request (col. 11 lines 24-27).

One skilled in the art would have recognized calculating an average bandwidth

for all existing QoS-unspecified traffic, an would have applied Ho et al's MCR in Yin et

al's connection request for a particular class of service. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Ho et al's flexible threshold based buffering system for use in digital communication devices in Yin et al's method and apparatus for controlling admission of connection requests with the motivation being fairly distribute buffer space based on the number of active connections and MCR proportions thereof (col. 11 lines 21-24).

For claim 11, Yin et al. disclose, method and apparatus for controlling admission of connection requests, comprising:

a controller (figure 1, reference 10, col. 4 lines 34-35) to receive a QoS (Quality of Service) specified connection request associated with a link (figure 3, reference 54, col. 5 lines 51-53); and

an admission manager to:

determine an assigned bandwidth on a link (figure 3, reference 60, Table 2, col. 5 lines 61-62);

determining whether the QoS-specified connection request is accepted based on a combination of the assigned bandwidth and the average bandwidth (figure 3, col. 6 lines 9-19).

However, Yin et al. does not disclose determine an average bandwidth of all existing QoS-unspecified traffic on the link. In an analogous art, Ho et al. disclose determine an average bandwidth of all existing QoS unspecified traffic on the link (col. 11 lines 24-27).

One skilled in the art would have recognized determine an average bandwidth of all existing QoS-unspecified traffic, and would have applied Ho et al's MCR in Yin et al's connection request for a particular class of service. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Ho et al's flexible threshold based buffering system for use in digital communication devices in Yin et al's method and apparatus for controlling admission of connection requests with the motivation being fairly distribute buffer space based on the number of active connections and MCR proportions thereof (col. 11 lines 21-24).

Allowable Subject Matter

4.   Claims 2-5, and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5.   Claims 6-10 and 16 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 6, the prior art fails to teach a combination of the steps of:

a call admission manager for calculating an estimated bandwidth by adding up average QoS-unspecified traffic for all existing QoS-unspecified connections on a link associated with a QoS-specified connection request, wherein the estimated bandwidth is a bandwidth to be assigned to the existing QoS-unspecified connections on the link, and determining whether the QoS-specified connection request is accepted based on a combination of the estimated bandwidth and an assigned bandwidth that is already assigned in the link, in the specific combination as recited in the claim.

Regarding claim 9, the prior art fails to teach a combination of the steps of:

a calculator for adding up existing QoS-unspecified traffic obtained at

predetermined sampling time intervals to produce a first average QoS-unspecified

traffic, and calculating an estimated bandwidth by averaging a predetermined number of

the first average QoS unspecified traffic for existing QoS-unspecified connections on a

link associated with a QoS-specified connection request, where the estimated

bandwidth is a bandwidth to be assigned to the existing QoS-unspecified connections

on the link; and

a call admission manager for determining whether the QoS-specified connection

request is accepted based on a combination of the estimated bandwidth and an

assigned bandwidth that is already assigned in the link, in the specific combination as

recited in the claim.

Regarding claim 16, the prior art fails to teach a combination of the steps of:

means for adding the assigned bandwidth and the average bandwidth to produce
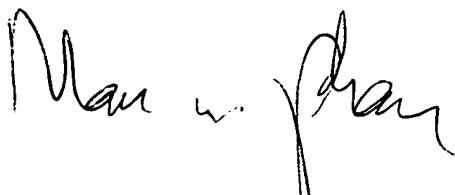
a currently assigned bandwidth on the link;

means for determining an available bandwidth of the link by subtracting the

currently assigned bandwidth from a full bandwidth of the link, in the specific

combination as recited in the claim.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-

3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

TN

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MAN U. PHAN
PRIMARY EXAMINER